Plant Disease in Kansas

VOLUME 33, ISSUE 7

JULY 12, 2007



Special points of interest:

- Disease situation in soybeans
- Corn survives flooding
- Update on wheat diseases and harvest

Soybean disease continues to increase

Bacterial blight and brown spot diseases have been reported in a number of fields in central and eastern Kansas. Bacterial blight appears to more prevalent in south central Kansas where as brown spot is found in many fields in eastern Kansas.

In east central and some of southeast Kansas, early planted beans were beginning flowering. In some of the fields in Anderson, Franklin, Miami, and Allen counties defoliation of lower leaves and petioles were noted. Weather has been near ideal for the disease to develop with warm humid condition brought about by record rainfall. The highest level of defoliation was found to be in Anderson County northwest of Garnett. Some

early planted fields in that area had 30 to 50 per cent defoliation. The disease was present at about 5 to 10 severity on remaining leaves causing concern for advanced defoliation as the disease climbed the plant to the upper canopy leaves.

Other diseases noted were viral infection in some fields which

samples were taken. It appeared the symptoms were either bean pod mottle or soybean mosaic. No root rot or seedling blights were noted in the early planted fields. No Asian soybean rust was observed with the closest known finds in central Louisiana.

Figure 1. Brown spot on leaves.



Corn survives flooding; disease on the increase

Recent flooding of bottom land in east central Kansas appeared to have minor effect on corn. Flooded fields where the corn was not completely submerged had healthy plants. Corn was sometimes lodged in areas of high current. In areas where the water sat for a period of time and plants were sub-

merged then the corn was dead.

Gray leaf spot in east central Kansas was at moderate levels in some fields. Fields were at the milk stage. Gray leaf spot had advanced about 1/3 up the plant and 5-10 % leaf severity. Most fields had low disease pressure. Rust was also detected.

Figure 2. Corn ear silted but healthy.



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Plant Protection and Weed Control Program

Plant Protection and Weed Control staff work to ensure the health of the state's native and cultivated plants by excluding or controlling destructive pests, diseases and weeds. Staff examine and analyze pest conditions in crop fields, rangelands, greenhouses and nurseries. Action taken to control potential infestations of new pests, whether they are insects, plants diseases or weeds, is beneficial to the economy and the environment.

Our Mission is to:

- Exclude or control harmful insects, plant diseases, and weeds:
- Ensure Kansas plants and plant products entering commerce are free from quarantine pests;
- Provide customers with inspection and certification services.

The Plant Disease Survey in Kansas has been conducted since 1976. The survey addresses disease situations in field crops, native ecosystems, and horticultural trade. The Kansas Department of Agriculture works cooperatively with Kansas State University and Extension programs, United States Department of Agriculture, and various commodity groups.

Wheat update

The wheat harvest was nearing the end of a long and frustrating event for many producers in Kansas. Frequent rains across eastern and central Kansas made for a difficult harvest of a crop which had already struggled with freeze damage and various foliar diseases. In western Kansas, the story was completely different whereas yields and test weights were at bumper levels.

During the harvest, the Kansas Department of Agriculture conducts sampling at local grain elevators for the National Karnal Bunt Survey. This survey certifies the crop to be free of a disease which is regulated in international markets. Over 370 samples were collected this year with all counties participating. Results in the past have indicated that this disease is not present in Kansas or surrounding states.

During the harvest survey, some diseases were noted. Scab was present in wheat samples taken in Pratt, Kingman, Reno, and Sedgwick counties. In some north central counties, common bunt was causing rejection of some loads coming into the elevator. Black point was common to many samples taken in eastern and central Kansas.

Figure 3. Combines harvest wheat in Thomas County. Harvest was very good in many areas of western Kansas.

